



DEC 2 4 2012

Gerardo C. Rios, Chief Permits Office (AIR-3) U.S. EPA - Region IX 75 Hawthorne St San Francisco, CA 94105

Notice of Final Action - Minor Title V Permit Modification Re:

> District Facility # N-3233 **Project # N-1113942**

Dear Mr. Rios:

The Air Pollution Control Officer has modified the Title V permit for Modesto Irrigation District by incorporating Authorities to Construct N-3233-6-1, N-3233-7-1, N-3233-8-1, N-3233-9-1, N-3233-10-1 and N-3233-11-1. The modifications were to relocate the oxidation catalysts relative to the selective catalytic reduction catalysts.

Enclosed is the modified Title V permit. The application and proposal were sent to US EPA Region IX on November 1, 2012. No comments were received following the District's preliminary decision on this project.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Rupi Gill, Permit Services Manager, at (209) 557-6400.

Sincerely,

David Warner

Director of Permit Services

DW:MJS/st

Enclosures

Seved Sadredin

Executive Director/Air Pollution Control Officer





DEC 2 4 2012

Glenn Mount Modesto Irrigation District PO Box 4060 Modesto, CA 95352

Re: Notice of Final Action - Minor Title V Permit Modification

District Facility # N-3233 Project # N-1113942

Dear Mr. Mount:

The Air Pollution Control Officer has modified the Title V permit for Modesto Irrigation District by incorporating Authorities to Construct N-3233-6-1, N-3233-7-1, N-3233-8-1, N-3233-9-1, N-3233-10-1 and N-3233-11-1. The modifications were to relocate the oxidation catalysts relative to the selective catalytic reduction catalysts.

Enclosed is the modified Title V permit. The application and proposal were sent to US EPA Region IX on November 1, 2012. No comments were received following the District's preliminary decision on this project.

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Sincerely,

David Warner

Director of Permit Services

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Enclosures

Seyed Sadredin
Executive Director/Air Pollution Control Officer

PERMIT UNIT: N-3233-6-2

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3A).

PERMIT UNIT REQUIREMENTS

- The unit shall be fueled solely with PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- The combined start-up and shutdown duration of this unit shall not exceed 2 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- The combined start-up and shutdown duration for permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 2010 hours during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- The NOx emissions during steady state operation shall not exceed 5 ppmvd @15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- The NOx emissions during start-up and shutdown periods shall not exceed 9.48 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- The CO emissions during steady state operation shall not exceed 13 ppmvd @ 15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- The CO emissions during start-up and shutdown periods shall not exceed 14.3 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- The VOC emissions during steady state operation shall not exceed 20 ppmvd @ 15% O2 as methane, over a 3 hour averaging period, [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- The VOC emissions during start-up and shutdown periods shall not exceed 7.53 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The SOx emissions shall not exceed 0.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The PM10 emissions shall not exceed 1.3 lb/hr. The filterable portion of the PM10 shall not exceed 0.02 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. The ammonia emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. The combined NOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 12,049 pounds during the first calendar quarter, 12,049 pounds during the second calendar quarter, 12,049 pounds during the third calendar quarter and 12,050 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: MODESTO IRRIGATION DISTRICT Location: 920 WOODLANL N-3233-8-2: Nov 27 2012 4:35PM - SCHONHOM 920 WOODLAND AVENUE, MODESTO, CA 95351

- 14. The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. The combined VOC emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 13,920 pounds during the first calendar quarter, 13,920 pounds during the second calendar quarter, 13,920 pounds during the third calendar quarter and 13,921 pounds during the fourth calendar quarter, [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. The combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 49,993 lb/yr, based on a 12-month rolling total. The start-up and shutdown period contributions shall be determined utilizing the number of start-up and shutdown hours in combination with the start-up and shutdown period emission limit. The steady-state contribution shall be determined utilizing the fuel usage during the previous 12 months and the VOC emission concentration determined during the most recent District approved source test or representative testing allowed by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. The combined SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 9,600 pounds during any one calendar year. The SOx emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. The combined PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 7,800 pounds during the first calendar quarter, 7,800 pounds during the second calendar quarter, 7,800 pounds during the third calendar quarter and 7,800 pounds during the fourth calendar quarter. The PM10 emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. The facility-wide SOx emissions shall not exceed 54,750 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. The facility-wide CO emissions shall not exceed 199,999 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. Source testing to determine compliance with the NOx, CO, VOC, PM10 and ammonia emission limits of this permit shall be conducted not less than once every 12 months. The filterable and condensible PM10 emissions shall be determined separately. Representative testing, as specified in Rule 4702, may be allowed provided prior written District authorization is received. [District Rule 4702] Federally Enforceable Through Title V Permit
- 22. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 24. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane and the NOx emissions shall be reported as NO2. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 18, 25A or 25B, or ARB Method 100, SOx - CARB Method 100, PM10 - EPA Methods 201A and 202 and ammonia - BAAQMD Method ST-1B. Alternative source test methods are allowed provided prior written District authorization is received. [District Rules 1081, 2201 and 4702] Federally Enforceable Through Title V Permit PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

Facility Name: MODESTO IRRIGATION DISTRICT 920 WOODLAND AVENUE, MODESTO, CA 95351

- 27. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) on each engine exhaust that continuously measures and records the exhaust gas NOx, CO, and O2 concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns. [District Rules 1080 and 4702 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 28. NOx, CO and O2 CEMS shall meet the requirements in 40 CFR Part 60, Appendix F and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 29. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 60 section 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 31. In accordance with 40 CFR Part 60, Appendix F, each CEMS shall be audited at least once each calendar quarter. A CEMS audit is not required for the quarters in which both a relative accuracy test audit (RATA) and source testing were performed. The District shall be notified prior to completion of the audits. The audit reports and the quarterly compliance reports shall be submitted to the District. [District Rule 1080 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 32. The owner or operator shall perform a RATA for NOx, CO and O2 as specified by 40 CFR Part 60, Appendix F at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- 33. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 34. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
- 35. The owner or operator shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period that a continuous monitoring system or monitoring device was inoperative. [District Rule 1080 and 2201 and 40 CFR 60.7(f)] Federally Enforceable Through Title V Permit
- 36. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
- 37. Records of the facility-wide CO and SOx emissions shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate,

- 38. A record of the combined quarterly and annual NOx, VOC and PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 39. A record of the combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11, based on a 12 month rolling total, shall be kept. [District Rule 2201] Federally Enforceable Through Title V
- 40. A record of the combined annual CO and SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 41. A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 42. A record of the daily number of hours of start-up and shutdown time for this unit shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
- 43. A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 44. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 45. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
- 46. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT: N-3233-7-2

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3B).

PERMIT UNIT REQUIREMENTS

- The unit shall be fueled solely with PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- The combined start-up and shutdown duration of this unit shall not exceed 2 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- The combined start-up and shutdown duration for permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 2010 hours during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- The NOx emissions during steady state operation shall not exceed 5 ppmvd @15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- The NOx emissions during start-up and shutdown periods shall not exceed 9.48 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
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- The VOC emissions during start-up and shutdown periods shall not exceed 7.53 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The SOx emissions shall not exceed 0.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The PM10 emissions shall not exceed 1.3 lb/hr. The filterable portion of the PM10 shall not exceed 0.02 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. The ammonia emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. The combined NOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 12,049 pounds during the first calendar quarter, 12,049 pounds during the second calendar quarter, 12,049 pounds during the third calendar quarter and 12,050 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit

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Facility Name: MODESTO IRRIGATION DISTRICT 920 WOODLAND AVENUE, MODESTO, CA 95351 Location:

N-3233-7-2: Nov 27 2012 4:35PM - SCHONHOM

- 14. The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
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- 18. The combined PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 7,800 pounds during the first calendar quarter, 7,800 pounds during the second calendar quarter, 7,800 pounds during the third calendar quarter and 7,800 pounds during the fourth calendar quarter. The PM10 emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
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- 38. A record of the combined quarterly and annual NOx, VOC and PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 39. A record of the combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11, based on a 12 month rolling total, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
- 40. A record of the combined annual CO and SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 41. A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 42. A record of the daily number of hours of start-up and shutdown time for this unit shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
- 43. A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 44. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 45. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
- 46. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT: N-3233-8-2

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3C).

PERMIT UNIT REQUIREMENTS

- 1. The unit shall be fueled solely with PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The combined start-up and shutdown duration of this unit shall not exceed 2 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The combined start-up and shutdown duration for permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 2010 hours during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The NOx emissions during steady state operation shall not exceed 5 ppmvd @15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 5. The NOx emissions during start-up and shutdown periods shall not exceed 9.48 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The CO emissions during steady state operation shall not exceed 13 ppmvd @ 15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 7. The CO emissions during start-up and shutdown periods shall not exceed 14.3 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. The VOC emissions during steady state operation shall not exceed 20 ppmvd @ 15% O2 as methane, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 9. The VOC emissions during start-up and shutdown periods shall not exceed 7.53 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The SOx emissions shall not exceed 0.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The PM10 emissions shall not exceed 1.3 lb/hr. The filterable portion of the PM10 shall not exceed 0.02 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. The ammonia emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. The combined NOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 12,049 pounds during the first calendar quarter, 12,049 pounds during the second calendar quarter, 12,049 pounds during the third calendar quarter and 12,050 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: MODESTO IRRIGATION DISTRICT Location: 920 WOODLAND AVENUE, MODESTO, CA 95351 N-3233-8-2: Nov 27 2012 4:38PM – SCHONHOM

- 14. The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. The combined VOC emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 13,920 pounds during the first calendar quarter, 13,920 pounds during the second calendar quarter, 13,920 pounds during the third calendar quarter and 13,921 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. The combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 49,993 lb/yr, based on a 12-month rolling total. The start-up and shutdown period contributions shall be determined utilizing the number of start-up and shutdown hours in combination with the start-up and shutdown period emission limit. The steady-state contribution shall be determined utilizing the fuel usage during the previous 12 months and the VOC emission concentration determined during the most recent District approved source test or representative testing allowed by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. The combined SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 9,600 pounds during any one calendar year. The SOx emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. The combined PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 7,800 pounds during the first calendar quarter, 7,800 pounds during the second calendar quarter, 7,800 pounds during the third calendar quarter and 7,800 pounds during the fourth calendar quarter. The PM10 emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. The facility-wide SOx emissions shall not exceed 54,750 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. The facility-wide CO emissions shall not exceed 199,999 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. Source testing to determine compliance with the NOx, CO, VOC, PM10 and ammonia emission limits of this permit shall be conducted not less than once every 12 months. The filterable and condensible PM10 emissions shall be determined separately. Representative testing, as specified in Rule 4702, may be allowed provided prior written District authorization is received. [District Rule 4702] Federally Enforceable Through Title V Permit
- 22. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 24. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane and the NOx emissions shall be reported as NO2. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 18, 25A or 25B, or ARB Method 100, SOx CARB Method 100, PM10 EPA Methods 201A and 202 and ammonia BAAQMD Method ST-1B. Alternative source test methods are allowed provided prior written District authorization is received. [District Rules 1081, 2201 and 4702] Federally Enforceable Through Title V Permit PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

Facility Name: MODESTO IRRIGATION DISTRICT
Location: 920 WOODLAND AVENUE, MODESTO, CA 95351
N-3233-8-2: Nov 27 2012 4:38PM - SCHONHOM

- 27. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) on each engine exhaust that continuously measures and records the exhaust gas NOx, CO, and O2 concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns. [District Rules 1080 and 4702 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 28. NOx, CO and O2 CEMS shall meet the requirements in 40 CFR Part 60, Appendix F and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 29. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 60 section 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 31. In accordance with 40 CFR Part 60, Appendix F, each CEMS shall be audited at least once each calendar quarter. A CEMS audit is not required for the quarters in which both a relative accuracy test audit (RATA) and source testing were performed. The District shall be notified prior to completion of the audits. The audit reports and the quarterly compliance reports shall be submitted to the District. [District Rule 1080 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 32. The owner or operator shall perform a RATA for NOx, CO and O2 as specified by 40 CFR Part 60, Appendix F at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- 33. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 34. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
- 35. The owner or operator shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period that a continuous monitoring system or monitoring device was inoperative. [District Rule 1080 and 2201 and 40 CFR 60.7(f)] Federally Enforceable Through Title V Permit
- 36. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
- 37. Records of the facility-wide CO and SOx emissions shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

- 38. A record of the combined quarterly and annual NOx, VOC and PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 39. A record of the combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11, based on a 12 month rolling total, shall be kept. [District Rule 2201] Federally Enforceable Through Title V
- 40. A record of the combined annual CO and SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 41. A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 42. A record of the daily number of hours of start-up and shutdown time for this unit shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
- 43. A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 44. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 45. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
- 46. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT: N-3233-9-2

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3D).

PERMIT UNIT REQUIREMENTS

- 1. The unit shall be fueled solely with PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The combined start-up and shutdown duration of this unit shall not exceed 2 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The combined start-up and shutdown duration for permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 2010 hours during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The NOx emissions during steady state operation shall not exceed 5 ppmvd @15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 5. The NOx emissions during start-up and shutdown periods shall not exceed 9.48 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The CO emissions during steady state operation shall not exceed 13 ppmvd @ 15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 7. The CO emissions during start-up and shutdown periods shall not exceed 14.3 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. The VOC emissions during steady state operation shall not exceed 20 ppmvd @ 15% O2 as methane, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 9. The VOC emissions during start-up and shutdown periods shall not exceed 7.53 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The SOx emissions shall not exceed 0.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The PM10 emissions shall not exceed 1.3 lb/hr. The filterable portion of the PM10 shall not exceed 0.02 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. The ammonia emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. The combined NOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 12,049 pounds during the first calendar quarter, 12,049 pounds during the second calendar quarter, 12,049 pounds during the third calendar quarter and 12,050 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: MODESTO IRRIGATION DISTRICT Location: 920 WOODLAND AVENUE, MODESTO, CA 95351 N-3233-9-2: Nov 27 2012 4:38PM – SCHONHOM

- 14. The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. The combined VOC emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 13,920 pounds during the first calendar quarter, 13,920 pounds during the second calendar quarter, 13,920 pounds during the third calendar quarter and 13,921 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. The combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 49,993 lb/yr, based on a 12-month rolling total. The start-up and shutdown period contributions shall be determined utilizing the number of start-up and shutdown hours in combination with the start-up and shutdown period emission limit. The steady-state contribution shall be determined utilizing the fuel usage during the previous 12 months and the VOC emission concentration determined during the most recent District approved source test or representative testing allowed by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. The combined SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 9,600 pounds during any one calendar year. The SOx emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. The combined PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 7,800 pounds during the first calendar quarter, 7,800 pounds during the second calendar quarter, 7,800 pounds during the third calendar quarter and 7,800 pounds during the fourth calendar quarter. The PM10 emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. The facility-wide SOx emissions shall not exceed 54,750 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. The facility-wide CO emissions shall not exceed 199,999 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. Source testing to determine compliance with the NOx, CO, VOC, PM10 and ammonia emission limits of this permit shall be conducted not less than once every 12 months. The filterable and condensible PM10 emissions shall be determined separately. Representative testing, as specified in Rule 4702, may be allowed provided prior written District authorization is received. [District Rule 4702] Federally Enforceable Through Title V Permit
- 22. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 24. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane and the NOx emissions shall be reported as NO2. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 18, 25A or 25B, or ARB Method 100, SOx CARB Method 100, PM10 EPA Methods 201A and 202 and ammonia BAAQMD Method ST-1B. Alternative source test methods are allowed provided prior written District authorization is received. [District Rules 1081, 2201 and 4702] Federally Enforceable Through Title V Permit PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

Facility Name: MODESTO IRRIGATION DISTRICT Location: 920 WOODLAND AVENUE, MODESTO, CA 95351 N-3233-9-2: Nov 27 2012 4:38PM – SCHONHOM

- 27. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) on each engine exhaust that continuously measures and records the exhaust gas NOx, CO, and O2 concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns. [District Rules 1080 and 4702 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 28. NOx, CO and O2 CEMS shall meet the requirements in 40 CFR Part 60, Appendix F and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 29. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 60 section 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 31. In accordance with 40 CFR Part 60, Appendix F, each CEMS shall be audited at least once each calendar quarter. A CEMS audit is not required for the quarters in which both a relative accuracy test audit (RATA) and source testing were performed. The District shall be notified prior to completion of the audits. The audit reports and the quarterly compliance reports shall be submitted to the District. [District Rule 1080 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 32. The owner or operator shall perform a RATA for NOx, CO and O2 as specified by 40 CFR Part 60, Appendix F at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- 33. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 34. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
- 35. The owner or operator shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period that a continuous monitoring system or monitoring device was inoperative. [District Rule 1080 and 2201 and 40 CFR 60.7(f)] Federally Enforceable Through Title V Permit
- 36. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
- 37. Records of the facility-wide CO and SOx emissions shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: MODESTO IRRIGATION DISTRICT Location: 920 WOODLAND AVENUE, MODESTO, CA 95351 N-3233-0-2: Nov 27 2012 4:38PM - SCHONHOM

- 38. A record of the combined quarterly and annual NOx, VOC and PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 39. A record of the combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11, based on a 12 month rolling total, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
- 40. A record of the combined annual CO and SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 41. A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 42. A record of the daily number of hours of start-up and shutdown time for this unit shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
- 43. A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 44. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 45. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
- 46. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT: N-3233-10-2

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3E).

PERMIT UNIT REQUIREMENTS

- The unit shall be fueled solely with PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title 1. V Permit
- The combined start-up and shutdown duration of this unit shall not exceed 2 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- The combined start-up and shutdown duration for permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 2010 hours during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- The NOx emissions during steady state operation shall not exceed 5 ppmvd @15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- The NOx emissions during start-up and shutdown periods shall not exceed 9.48 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- The CO emissions during steady state operation shall not exceed 13 ppmvd @ 15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- The CO emissions during start-up and shutdown periods shall not exceed 14.3 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- The VOC emissions during steady state operation shall not exceed 20 ppmyd @ 15% O2 as methane, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- The VOC emissions during start-up and shutdown periods shall not exceed 7.53 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The SOx emissions shall not exceed 0.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The PM10 emissions shall not exceed 1.3 lb/hr. The filterable portion of the PM10 shall not exceed 0.02 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. The ammonia emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. The combined NOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 12,049 pounds during the first calendar quarter, 12,049 pounds during the second calendar quarter, 12,049 pounds during the third calendar quarter and 12,050 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: MODESTO IRRIGATION DISTRICT Logation: 920 WOODLAND AVENUE, MODESTO, CA 95351 N-3233-10-2: Nov 27 2012 4:38PM - SCHONHOM

- 14. The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. The combined VOC emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 13,920 pounds during the first calendar quarter, 13,920 pounds during the second calendar quarter, 13,920 pounds during the third calendar quarter and 13,921 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. The combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 49,993 lb/yr, based on a 12-month rolling total. The start-up and shutdown period contributions shall be determined utilizing the number of start-up and shutdown hours in combination with the start-up and shutdown period emission limit. The steady-state contribution shall be determined utilizing the fuel usage during the previous 12 months and the VOC emission concentration determined during the most recent District approved source test or representative testing allowed by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. The combined SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 9,600 pounds during any one calendar year. The SOx emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. The combined PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 7,800 pounds during the first calendar quarter, 7,800 pounds during the second calendar quarter, 7,800 pounds during the third calendar quarter and 7,800 pounds during the fourth calendar quarter. The PM10 emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. The facility-wide SOx emissions shall not exceed 54,750 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. The facility-wide CO emissions shall not exceed 199,999 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. Source testing to determine compliance with the NOx, CO, VOC, PM10 and ammonia emission limits of this permit shall be conducted not less than once every 12 months. The filterable and condensible PM10 emissions shall be determined separately. Representative testing, as specified in Rule 4702, may be allowed provided prior written District authorization is received. [District Rule 4702] Federally Enforceable Through Title V Permit
- 22. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 24. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane and the NOx emissions shall be reported as NO2. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 18, 25A or 25B, or ARB Method 100, SOx CARB Method 100, PM10 EPA Methods 201A and 202 and ammonia BAAQMD Method ST-1B. Alternative source test methods are allowed provided prior written District authorization is received. [District Rules 1081, 2201 and 4702] Federally Enforceable Through Title V Permit PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

Facility Name: MODESTO IRRIGATION DISTRICT Location: 920 WOODLAND AVENUE, MODESTO, CA 95351 N-3233-10-2 Nov 27 2012 4:36PM -- SCHONHOM

- 27. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) on each engine exhaust that continuously measures and records the exhaust gas NOx, CO, and O2 concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns, [District Rules 1080 and 4702 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 28. NOx, CO and O2 CEMS shall meet the requirements in 40 CFR Part 60, Appendix F and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA, [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 29. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 60 section 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 31. In accordance with 40 CFR Part 60, Appendix F, each CEMS shall be audited at least once each calendar quarter. A CEMS audit is not required for the quarters in which both a relative accuracy test audit (RATA) and source testing were performed. The District shall be notified prior to completion of the audits. The audit reports and the quarterly compliance reports shall be submitted to the District. [District Rule 1080 and 40 CFR 60,8 and 40 CFR 60,13] Federally Enforceable Through Title V Permit
- 32. The owner or operator shall perform a RATA for NOx, CO and O2 as specified by 40 CFR Part 60, Appendix F at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- 33. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 34. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
- 35. The owner or operator shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period that a continuous monitoring system or monitoring device was inoperative. [District Rule 1080 and 2201 and 40 CFR 60.7(f)] Federally Enforceable Through Title V Permit
- 36. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
- 37. Records of the facility-wide CO and SOx emissions shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

- 38. A record of the combined quarterly and annual NOx, VOC and PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 39. A record of the combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11, based on a 12 month rolling total, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
- 40. A record of the combined annual CO and SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 41. A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 42. A record of the daily number of hours of start-up and shutdown time for this unit shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
- 43. A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 44. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 45. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
- 46. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT: N-3233-11-2

EXPIRATION DATE: 11/30/2015

EQUIPMENT DESCRIPTION:

11,667 BHP NATURAL GAS FIRED WARTSILA 20V34SG IC ENGINE POWERING AN 8.44 MW ELECTRICAL GENERATOR. THE ENGINE IS EQUIPPED WITH A TURBOCHARGER, AN INTERCOOLER, A SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST (MODESTO IRRIGATION DISTRICT DESIGNATION 3F).

PERMIT UNIT REQUIREMENTS

- 1. The unit shall be fueled solely with PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The combined start-up and shutdown duration of this unit shall not exceed 2 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The combined start-up and shutdown duration for permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 2010 hours during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The NOx emissions during steady state operation shall not exceed 5 ppmvd @15% O2, over a 3 hour averaging period, [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 5. The NOx emissions during start-up and shutdown periods shall not exceed 9.48 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The CO emissions during steady state operation shall not exceed 13 ppmvd @ 15% O2, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 7. The CO emissions during start-up and shutdown periods shall not exceed 14.3 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. The VOC emissions during steady state operation shall not exceed 20 ppmvd @ 15% O2 as methane, over a 3 hour averaging period. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 9. The VOC emissions during start-up and shutdown periods shall not exceed 7.53 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The SOx emissions shall not exceed 0.4 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The PM10 emissions shall not exceed 1.3 lb/hr. The filterable portion of the PM10 shall not exceed 0.02 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. The ammonia emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. The combined NOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 12,049 pounds during the first calendar quarter, 12,049 pounds during the second calendar quarter, 12,049 pounds during the third calendar quarter and 12,050 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: MODESTO IRRIGATION DISTRICT Location: 920 WOODLAND AVENUE, MODESTO, CA 95351 N-3233-11-2 Nov 27 2012 4:36PM - SCHONHOM

- 14. The combined CO emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 74,864 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. The combined VOC emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 13,920 pounds during the first calendar quarter, 13,920 pounds during the second calendar quarter, 13,920 pounds during the third calendar quarter and 13,921 pounds during the fourth calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. The combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 49,993 lb/yr, based on a 12-month rolling total. The start-up and shutdown period contributions shall be determined utilizing the number of start-up and shutdown hours in combination with the start-up and shutdown period emission limit. The steady-state contribution shall be determined utilizing the fuel usage during the previous 12 months and the VOC emission concentration determined during the most recent District approved source test or representative testing allowed by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. The combined SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 9,600 pounds during any one calendar year. The SOx emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. The combined PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall not exceed 7,800 pounds during the first calendar quarter, 7,800 pounds during the second calendar quarter, 7,800 pounds during the third calendar quarter and 7,800 pounds during the fourth calendar quarter. The PM10 emissions shall be determined by applying the hourly emission limit of these permits to the combined number of operating hours of these engines. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. The facility-wide SOx emissions shall not exceed 54,750 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. The facility-wide CO emissions shall not exceed 199,999 pounds during any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. Source testing to determine compliance with the NOx, CO, VOC, PM10 and ammonia emission limits of this permit shall be conducted not less than once every 12 months. The filterable and condensible PM10 emissions shall be determined separately. Representative testing, as specified in Rule 4702, may be allowed provided prior written District authorization is received. [District Rule 4702] Federally Enforceable Through Title V Permit
- 22. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 24. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane and the NOx emissions shall be reported as NO2. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 18, 25A or 25B, or ARB Method 100, SOx CARB Method 100, PM10 EPA Methods 201A and 202 and ammonia BAAQMD Method ST-1B. Alternative source test methods are allowed provided prior written District authorization is received. [District Rules 1081, 2201 and 4702] Federally Enforceable Through Title V Permit PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

Facility Name: MODESTO IRRIGATION DISTRICT
Location: 920 WOODLAND AVENUE, MODESTO, CA 95351
N-3233-11-2: Nov 27 2012 4:38PM -- SCHONHOM

- 27. The owner or operator shall install, certify, maintain, operate, and quality-assure a continuous emission monitor system (CEMS) on each engine exhaust that continuously measures and records the exhaust gas NOx, CO, and O2 concentrations. Continuous emissions monitors shall be capable of monitoring emissions during normal operating conditions and during startups and shutdowns. [District Rules 1080 and 4702 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 28. NOx, CO and O2 CEMS shall meet the requirements in 40 CFR Part 60, Appendix F and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 29. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA, [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 30. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 60 section 60.13(h), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 31. In accordance with 40 CFR Part 60, Appendix F, each CEMS shall be audited at least once each calendar quarter. A CEMS audit is not required for the quarters in which both a relative accuracy test audit (RATA) and source testing were performed. The District shall be notified prior to completion of the audits. The audit reports and the quarterly compliance reports shall be submitted to the District. [District Rule 1080 and 40 CFR 60.8 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 32. The owner or operator shall perform a RATA for NOx, CO and O2 as specified by 40 CFR Part 60, Appendix F at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitoring equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- 33. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 34. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
- 35. The owner or operator shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period that a continuous monitoring system or monitoring device was inoperative. [District Rule 1080 and 2201 and 40 CFR 60.7(f)] Federally Enforceable Through Title V Permit
- 36. The owner or operator shall submit a written report of CEMS operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess emissions (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEMS was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
- 37. Records of the facility-wide CO and SOx emissions shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

- 38. A record of the combined quarterly and annual NOx, VOC and PM10 emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar quarter and a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 39. A record of the combined VOC emissions from units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11, based on a 12 month rolling total, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
- 40. A record of the combined annual CO and SOx emissions from permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 41. A record of the combined number of hours of operation of permit units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 42. A record of the daily number of hours of start-up and shutdown time for this unit shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
- 43. A record of the combined number of hours of start-up and shutdown time for units N-3233-6, N-3233-7, N-3233-8, N-3233-9, N-3233-10 and N-3233-11 shall be kept. The records shall be kept on a calendar year basis and shall be updated daily. [District Rule 2201] Federally Enforceable Through Title V Permit
- 44. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 45. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information; total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
- 46. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 4702] Federally Enforceable Through Title V Permit

Facility Name: MODESTO IRRIGATION DISTRICT 920 WOODLAND AVENUE, MODESTO, CA 95351 N-3233-11-2: Nov 27 2012 4:36PM -- SCHONHOM